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				WANG, SHENGJUN
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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/648,376
Filing Date: August 25, 2000
Appellant(s): CANNELL ET AL.

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Deborah M. Herzfeld
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed June 15, 2006 appealing from the Office action
mailed August 11, 2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

The following is a listing of the evidence (e.g., patents, publications, Official Notice, and admitted prior art) relied upon in the rejection of claims under appeal.

US Patent 5,700,456	Dubief et al.	December 23, 1997
US Patent 5,656,258	Cauwet et al.	August 12, 1997
US Patent 5,958,392	Grollier et al.	September 28, 1999

(9) Grounds of Rejection

Claim Rejections 35 U.S.C. 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-12, 16-26, 50 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dubief et al. (US 5,700,456, IDS) in view of Cauwet et al. (US 5,656,258, of record), Grollier et al. (US 5,958, 392).

2. Dubief teach a cosmetic composition comprising ceramide compounds and a cationic polymer. The composition is particularly useful for protecting hairs. See, particularly, the abstract, and the claims. The elected ceramide and cationic polymer are particularly employed in a composition. See, particularly, example 7. The composition may further comprise other well-known cosmetic ingredients, such as thickener, preservatives, etc. The composition may be in

various forms, such as liquid, cream, gel. The composition may be used before or after shampoo, perm, bleaching or dyeing. See, particularly, columns 8-9.

Dubief does not teach expressly the employment of amphoteric polymer in the composition, or polyquaternium-22, also known as MERQUAT 280.

However, Grollier et al. teaches the employment of a combination of cationic polymer and amphoteric polymer in hair cosmetic composition. Such combination has over come many disadvantages of compositions using cationic polymer alone or using other combination. See, particularly, column 1, lines 16-59, and the claims. Among the disclosed amphoteric polymers are copolymers of acrylic acid and dialkylaminoalkyl acrylamide. See, column 2, line 20 to column 6, lines 20. The cation polymers include the polymer herein elected. See, particularly, column 6, lines 21 to column 12, line 30. The molecular weight of the polymers is 500 to 2,000,000, and the amounts of such polymers employed in the cosmetic composition are 0.01 to 10% by weight. See, particularly, the claims. Cauwet et al. teaches that polyquaternium-22, or MERQUAT 280 is a known amphoteric copolymer of acrylic acid and dialkylaminoalkyl acrylamide, and is particularly useful in hair treating composition with cation polymers. Cauwet also teaches the benefit of combination of cation polymer and amphoteric polymer in hair treating composition. See, particularly, the abstract, column 1, lines 49 bridging to column 2, line 65, column 3, lines 1-38, column 6, lines 10-28.

Therefore, it would have been *prima facie* obvious to a person of ordinary skill in the art, at the time the claimed the invention was made, to employ a combination of the cation polymer and the amphoteric polymer herein in Dubief² composition.

A person of ordinary skill in the art would have been motivated to employ a combination of the cationic polymer and the amphoteric polymer herein in Dubief⁷ composition because of the advantage of the combination of cationic polymer and amphoteric polymer disclosed by Grollier et al. and Cauwet et al. Further, making a kit comprising the composition herein and other hair treating composition, such as hair dyeing composition is obvious to one of ordinary skill in the art because such composition is known to be particularly useful before or after other hair treatment.

As to the particular ratio of the two polymers herein, note both Grollier et al. and Cauwet et al. teaches the benefit of the combination of cationic polymer and amphoteric polymers, and both teach a broad range of the ratio of the polymers. See, particularly, claim 1 in Cauwet et al. (any synergistic combination), and claim 16 in Grollier et al. (ratio of 10:1 to 1:10). It is well settled that in the case where the claimed ranges “overlap or lie inside ranges disclosed by the prior art” a *prima facie* case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990) (The prior art taught carbon monoxide concentrations of “about 1-5%” while the claim was limited to “more than 5%.” The court held that “about 1-5%” allowed for concentrations slightly above 5% thus the ranges overlapped.). Therefore, the cited ratio herein would have been obvious to one of ordinary skill in the art, absent evidence showing the criticality of the ratio.

(10) Response to Argument

3. In response to appellants' arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re*

Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In the instant case, the cited references, as a whole, teaches the benefit of combination of cationic polymer and amphoteric polymer in general, and polyquatemium in particular. The examiner recognizes that Grollier does not expressly teach the particular amphoteric polymer. However, Cauwet et al. teach the amphoteric polymer is similarly useful in combination with cationic polymer. Therefore the combination of the two polymers herein would have been obvious to one of ordinary skill in the art.

As to the particular ratio herein, note, question under 35 U.S.C. 103 is not merely what reference expressly teach, but what they would have suggested to one of ordinary skill in the art at the time the invention was made; all disclosures of prior art, including unpreferred embodiments, must considered. In re Lamberti and Konort (CCPA), 192 USPQ 278. In the instant case, both Grollier et al. and Cauwet et al. teach the benefit of the combination of cationic polymer and amphoteric polymers, and both teach a broad range of the ratio of the polymers. See, particularly, claim 1 in Cauwet et al. (any synergistic combination), and claim 16 in Grollier et al. (ratio of 10:1 to 1:10). The examiner notes the particular ratio herein does not fall within the preferred ratio of Cauwet et al. However, not being the preferred embodiment of prior art alone is not sufficient for unobvious from the prior art. It is well settled that disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or no preferred embodiments. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." *In re Gurley*, 27 F.3d 551, 554, 31

USPQ2d 1130, 1132 (Fed. Cir. 1994). Therefore, absent evidence showing an unexpected benefit residing in the particular ratio herein, the claims have been properly rejected.

4. In response to appellants' argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the teaching, suggestion and motivation are found in the cited references and the knowledge generally available to one of ordinary skill in the art. Particularly, the cited references disclosed that it is well known in the art to use a combination of cationic polymer and amphoteric polymers in cosmetic composition, and each of the particularly polymers herein are known to be used in such combination.

Appellants further contend that the cited references as a whole do not teach or suggest all the limitations recited in the claims, particularly, the ratio of cationic polymer to polyquaternium-22. Applicants specifically argue that Cauwet et al. do not teach the ration herein recited, citing the preferred ratios disclosed by Cauwet et al. The examiner respectfully disagrees. The examiner reiterates that "not being the preferred embodiment of prior art alone is not sufficient for unobvious from the prior art. It is well settled that disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or no preferred embodiments. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971)." A preferred embodiment is not a limitation of teaching. Claim 1 in Cauwet et al. states "wherein the (a)

polymer and the (b) copolymer are present in a weight ratio synergistically effective with respect to at least one cosmetic property.” Applicants may not read too much of the specification into the claims. It is further noted that Grollier et al. disclosed a broad ratio range of cationic polymer/amphoteric polymer. The cited references as a whole would have clearly suggested that the combination of a cationic polymer, and an amphoteric polymer (such as polyquaternium-22) would provide synergistic benefit to a cosmetic composition. The particular ratio range herein (greater than 3:1) would have been obvious over the range disclosed in the prior art (1:10 to 10:1, and a synergistic combination).

Appellants also contend that the examiner fails to address all the limitation recited in claim 50, which directed to a kit having two separated compartments, one contains the composition herein claimed, and the other one contains a composition for chemical treatment of keratinous fiber (hair). In response, it recognized that making a kit comprising the composition herein and other hair treating composition, such as hair dyeing composition is obvious to one of ordinary skill in the art because such composition is known to be particularly useful before or after other hair treatment, and it is obvious to use the composition herein claimed to protect the chemically treated hair. Packing two cosmetic compositions known to be useful together, or sequentially, would be merely a matter of obvious engineering choice. *In re Larson*, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner’s answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Shengjun Wang

S. L. Wang
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